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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,898	08/04/2000	David J. Wetherall	41007.P001.	1934

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EXAMINER	
NGUYEN, STEVEN H D	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/631,898	WETHERALL ET AL.	
	Examiner	Art Unit	
	Steven HD Nguyen	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) *1-10,12-36,38 and 39* is/are allowed.

6)☒ Claim(s) *11 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/02, 4/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I in the reply filed on 8/18/04 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 8-10, 12-16, 19-26, 29-31, 33-37 and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Wan (USP 6529475).

Regarding claims 1 and 12, Wan discloses a network comprising a plurality of network nodes (Fig 2, Ref 104); a plurality of routing devices to route network traffics between selected ones of said network nodes (Fig 2, Ref 100, 101); a plurality of sensors (Fig 2, Ref 110 for monitoring and reporting the statistical, Fig 3, Ref 202, 203 and 204; see col. 6, lines 26-44), either integrally disposed in a subset of said routing devices or externally disposed and coupled to the subset of routing devices, to monitor and report on network traffic routed through the subset of routing devices, and a director (Fig 2, Ref 112 for receiving the report from the monitoring 110 and determining the congestion status; if the network is congested, generating a message to instructing the routing devices react to the congestion; See Fig 3, Ref 205, 206 and 207) coupled to said sensors to receive network traffic information from said sensors for said

subset of routing devices, and to determine in response whether moderating actions are to be taken to moderate an amount of network traffic destined for at least one of said network nodes, based at least in part on some of said network traffic information received from said sensors (col. 8, lines 46-57).

Regarding claims 2 and 13, Wan discloses the sensors are equipped to periodically gather data denoting at least amount of network traffic routed through said subset of routing devices, said data including destinations of said network traffic (col. 8, lines 47-57, periodically extracted data pass through the network devices).

Regarding claims 3 and 14, Wan discloses the sensors are equipped to periodically report to said director data denoting at least amount of network traffic routed through said subset of routing devices, said data including destinations of said network traffic (col. 8, lines 47-57, periodically reporting the collected data).

Regarding claims 4 and 15, Wan discloses the sensors are equipped to facilitate application of desired moderation on network traffic through selected ones of said subset of routing devices (Fig 3, Ref 206-207, col. 7, lines 2-17).

Regarding claims 5 and 16, Wan discloses the director is further employed to determine in response moderating actions to be taken, including where the moderating actions are to be taken, if the director determines that moderating actions are to be taken to moderate the amount of network traffic (Col. 7, lines 2-58).

Regarding claims 8 and 19, Wan discloses the director is further employed to determine in response whether filtering actions are to be taken for the at least one of the network nodes,

based at least in part on some of said network traffic reports received from said sensors (Col. 7, lines 2-58, enforce service priority, filtering).

Regarding claims 9 and 20, Wan discloses the director is further employed to determine in response where the filtering actions are to be taken, if the director determines that filtering actions are to be taken to filter out network traffic (Col. 7, lines 2-58, enforce service priority, filtering).

Regarding claims 10 and 21, Wan discloses the sensors are equipped to facilitate application of desired filtering on network traffic through selected ones of said subset of routing devices (Col. 7, lines 2-58, enforce service priority, filtering).

Regarding claims 22-23, sensing or determining is performing using a collection of hierarchically organized devices (Fig 2 and Fig 3).

Regarding claim 24, Wan discloses an apparatus comprising (a) a storage medium having stored therein a plurality of programming instructions designed to implement (a.1) a requestor (Fig 3, Ref 202 and 203) to request a routing device of a network for data denoting network traffic routed through said routing device, and to request alteration of routing operations of said routing device to moderate an amount of network traffic going through said routing device, (a.2) a reporter (Fig 3, Ref 204) to report said data denoting network traffic routed through said routing device, and (a.3) a regulator (Fig 3, Ref 204) to control submission of said network traffic moderation routing operation alteration requests to said routing device, responsive to moderation instructions provided, and (b) a processor coupled the storage medium to execute the programming instructions (Fig 2, Ref 110 includes a requester, reporter and regulator for collecting the traffic information via the routing device 101 and 100 for reporting to

another device and controlling the routing operation of the routing devices 100 and 101 by provided instruction such monitoring (See Fig 3, col. 8, lines 38-57).

Regarding claim 25, Wan discloses the apparatus further comprises a communication interface coupled to the processor, to couple the apparatus to said routing device and to facilitate submission of said network traffic moderation routing operation alteration requests to said routing device (Fig 3, send a provided instruction to the Ref 100).

Regarding claim 26, Wan discloses the apparatus further comprises a communication interface coupled to the processor, to couple said apparatus to a director (Fig 2, Ref 112) that determines whether moderate actions are to be taken to moderate an amount of network traffic, based on said data reported, to facilitate reporting of said data to said director (Fig 2, Ref 112 and Fig 3).

Regarding claim 29, Wan discloses the requestor is further used to request filtering operations of said routing device to filter out network traffic going through said routing device (Col. 7, lines 2-58, enforce service priority, filtering).

Regarding claim 30, Wan discloses networking apparatus comprising a first functional unit to route network traffic (Fig 2, Ref 100 and 101); a second functional unit coupled to the first functional unit to gather data denoting network traffic routed through a routing device, and to apply moderating actions to said first functional unit to moderate network traffic going through said networking apparatus; a third functional unit coupled to the second functional unit to report said data (Fig 2, Ref 110 for collecting data and report data; Fig 3, Ref 203-207); and a fourth functional unit coupled to the second functional unit to control application of said moderating actions to said first functional unit to effectuate a desired moderation of network

traffic going through said networking apparatus, responsive to moderation instructions provided (Fig 2, Ref 110 for forwarding a provided information to the first unit in order to control congestion; See Fig 3 and col. 8, lines 38-57).

Regarding claim 31, Wan discloses the networking apparatus further comprises a communication interface coupled to the fourth functional unit, to couple said networking apparatus to a director (Fig 2, Ref 112) that determines whether moderate actions are to be taken to moderate an amount of network traffic, based on said data reported, to facilitate reporting of said gathered data to said director (Fig 3).

Regarding claim 33 and 39, Wan discloses the second functional unit is further used to cause the first functional unit to filter out network traffic going through said networking apparatus (Col. 7, lines 2-58, enforce service priority, filtering).

Regarding claim 34, Wan discloses an apparatus comprising (a) a storage medium having stored therein a plurality of programming instructions designed to implement a director (Fig 2, Ref 112) to receive reporting of data denoting network traffic routed through a plurality of routing devices of a network (Fig 3), and to determine in response whether moderating actions are to be taken to moderate an amount of network traffic destined for at least one of a plurality of network nodes of said network, based at least in part or some of said reported data; and (b) a processor coupled the storage medium to execute the programming instructions (See col. 8, lines 36-57).

Regarding claim 35, Wan discloses said programming instructions are designed to determine whether a moderation threshold has been reached for a network node, based at least in part on some of said reported data (Fig 3, Ref 205, congestion must compare with a threshold).

Regarding claim 36, Wan discloses programming instructions are further designed to determine moderating actions to be taken, including where the moderating actions are to be taken, if it is determined that moderating actions are to be taken to moderate an amount of network traffic (Col. 7, lines 2-58).

Regarding claim 37, Wan discloses the apparatus further comprises a communication interface coupled to the processor, to couple the apparatus to a plurality of sensors (Fig 2, Ref 110) to receive said data reporting.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 6-7, 17-18, 28, 32, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wan.

Wan fails to disclose the director is further employed to determine in response whether moderating actions are to be relaxed for the at least one of the network nodes, based at least in part or some of said network traffic reports received from said sensors and moderation relaxation actions to be taken, including where the moderation relaxation actions are to be taken, if the director determines that moderation relaxation actions are to be taken to relax moderation on the amount of network traffic. Wan suggests a method for reducing the transmission rate of the nodes or throttling back until the congestion relieved. However, the examiner takes an official

notice that a method and system for sending an information to the network node after the congestion relieved in order to allow the network node to increase transmitting rate or release the priority rules are well known and expected in the art of the time of invention was made to implement a method and system for notifying the network node that the congestion relieved in order to allow the network node to increase transmission rate etc. into the method and system of Wan. The motivation would have been to return the network back into normal function after enforce a rule on a traffic.

Allowable Subject Matter

6. Claims 11 and 27 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vaid (USP 6078953) discloses a method and system for monitoring QOS of network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven HD Nguyen
Primary Examiner
Art Unit 2665
1/13/05